

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-009138**Date Inspected:** 22-Sep-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1845**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Xu Yumin**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Trail Assembly**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) S. Manjunath. Math was present during the times noted above for observations relative to the work being performed.

Orthotropic Box Girder (OBG) Trial Assembly Areas

Segment 5BE to 5CE

This QA Inspector observed ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) for I-Rib Stiffeners which are located at Edge Panel, Cross Beam side. The weld joint is identified as EP 50A-13. The welder is identified as 068764. In process SMAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-P-2214-B-U2-FCM.

Segment 1AE to 1AAE

This QA Inspector observed ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) for Stiffeners which are welded in between the "I" Rib stiffener at Deck Panel. The weld joint is identified as OBE1-077/078. The welder is identified as 045138. In process SMAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-P-2113-FCM-1.

Segment 1AE to 1AAE

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This QA Inspector observed ZPMC welding personnel performing Flux Cored Arc Welding (FCAW) for Stiffeners which are welded in between the "I" Rib stiffener at Bottom Panel. The weld joint is identified as OBE1-194/195 and 197/198. The welder is identified as 067103. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-2133.

### Segment 5AW

This Quality Assurance (QA) Inspector observed at 5AW at PP 31 Lower Chevron ASTM A 325, Installed bolts snug tightening was in progress.

### Segment 5BW

This Quality Assurance (QA) Inspector observed at 5BW at PP33 Lower Chevron East side Splice Plate to box section loosened up and faying surface cleaned noticed installation of shim plate and ASTM A 325 Grade bolts was in progress.

### Segment 3AW

This Quality Assurance (QA) Inspector observed at 3AW from PP 19 to PP 23 painting activity was in progress.

### Segment 5BE and 5CE

This Quality Assurance (QA) Inspector observed at Corner Assembly Cross Beam side I-Rib for Deck Panel being CJP welded for the same flush grinding in progress between PP 34 and 35.

### Segment 5BE and 5CE

This Quality Assurance (QA) Inspector observed at Hold Back areas fillet weld grinding in progress between PP 34 and 35 for Bottom Panel and Side Panel (Cross Beam and Bike Path side).

### Segment 5BE

This Quality Assurance (QA) Inspector observed at PP 32 and PP 32.5 hold back areas for T-Stiffeners for Side Panel Cross Beam side fillet weld grinding was in progress for facilitating MT test.

### Lift 4 (4AW to 4BW)

This Quality Assurance (QA) Inspector observed from PP 24 to PP 28 painting activity was in progress.

### Segment 2AW and 2BW

This Quality Assurance (QA) Inspector observed between PP 16 and PP 17 Cross Beam side Cable Tray structure steel wire installation in diagonal way was in progress and noticed steel wires were being tensioned and locked by steel wire holding clip.

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### Segment 1AE to 1AAE

This Quality Assurance (QA) Inspector observed at segment 1AE to 1AAE Bottom Panel I-Rib MT was performed by ZPMC for hold back welded areas.

### Segment 1AE to 1AAE

This Quality Assurance (QA) Inspector observed at segment 1AE to 1AAE Transverse stiffener welded either side of splice weld grinding and cope holes radius being given final touch.

### Segment 1AE to 1BE

This Quality Assurance (QA) Inspector observed at segment 1AE to 1BE Longitudinal Diaphragm full length till Deck Panel Cross Beam side at 1800mm transverse stiffener bolt temporary removing is in progress and ASTM A 325 bolt installation was in progress.

### Segment 1AW to 1AAW

This Quality Assurance (QA) Inspector observed at segment 1AW to 1AAW Transverse welded area excavation was in progress at Side Panel Cross Beam side as UT rejectable indications observed.

### Segment 1AW to 1AAW

This Quality Assurance (QA) Inspector observed at segment 1AW to 1AAW Bottom Panel Transverse weld UT test performed by ZPMC for segment to segment weld.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

### Summary of Conversations:

No relevant conversations.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact , who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Math,Manjunath
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Quality Assurance Inspector
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<b>Reviewed By:</b>	Carreon,Albert
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QA Reviewer
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